

AMENDMENT TO THE CLAIMS

IN THE CLAIMS:

Please **AMEND** claim 18 as follows.

A copy of all pending claims and a status of the claims is provided below.

1. (Previously Presented) A semiconductor production reactor comprising at least one interior chamber surface, the at least one interior chamber surface comprising a first material and a substance incorporated in the first material, the substance balances receipt of a to-be-controlled material.
2. (Previously Presented) The reactor of claim 1, wherein the interior chamber surface minimizes volatile compound or complex formation upon a to-be-controlled material contacting the interior chamber surface.
3. (Previously Presented) The reactor of claim 1, wherein the surface blocks an etching material.
4. (Original) The reactor of claim 3, wherein the blocked etching material is selected from the group consisting of fluorine, chlorine, oxygen, argon, bromine, fluorocarbons and chlorofluorocarbons.
5. (Previously Presented) The chamber of claim 1, wherein the substance binds with silicon and minimizes Si-F bonding.
6. (Previously Presented) The chamber of claim 1, wherein the substance minimizes formation of a volatile compound or complex.

7. (Previously Presented) The chamber of claim 1, wherein the substance minimizes SiF₄ formation.

8. (Previously Presented) The chamber of claim 1, wherein the chamber comprises silicon or silicon carbide.

9. (Previously Presented) The chamber of claim 1, wherein the substance impedes reaction between the chamber surface and the to-be-controlled material.

10. (Previously Presented) The chamber of claim 1, wherein the chamber surface includes cobalt-silicon bonds and/or cobalt-fluorine bonds.

11. (Previously Presented) The chamber of claim 1, comprising a cleaned and substance-containing chamber surface.

12. (Previously Presented) The chamber of claim 1, including at least about 8 atom % cobalt in the at least one interior chamber surface.

13. (Previously Presented) A method of seasoning a reactor chamber, comprising at least the steps of:

providing a reactor chamber having at least one interior surface, the at least one interior surface comprising a first material;

incorporating a substance in the first material of the interior surface of the reactor chamber, the substance comprising a seasoning element or compound containing seasoning atoms or molecules that when combined with the chamber surface and/or a material to be used in the reactor chamber are relatively less volatile than a combination, alone without the seasoning atoms or molecules, of the chamber surface and the material to be used in the reactor chamber.

14. (Previously Presented) The method of claim 13, wherein the step of incorporating a substance includes placing the seasoning element or compound in solid form in the reaction chamber.

15. (Original) The method of claim 13, wherein a cobalt-containing solid is placed in the chamber.

16. (Original) The method of claim 13, wherein the seasoning element or compound is selected from the group consisting of cobalt-based elements or compounds, aluminum-based elements or compounds, copper-based elements or compounds, titanium-based elements or compounds and silicon-based elements or compounds.

17. (Original) The seasoning method of claim 13, including periodic cleaning of the chamber.

18. (Currently Amended) An etching method, comprising:
providing a reactor chamber having at least one interior surface comprising a first material;
incorporating a substance in the first material of the interior surface of the reactor to minimize an undesirable reaction at the surface and to prime the reactor; and
producing an etched product in the primed reactor chamber.

19. (Original) The etching method of claim 18, wherein the undesirable reaction is formation of a volatile compound or complex.

20. (Original) The etching method of claim 18, wherein the undesirable reaction is formation of SiF₄.

21. (Previously Presented) The method of claim 18, wherein after the step of incorporating the substance, the interior surface includes Si-Co and/or Co-F bonds.

22. (Original) The method of claim 18, including producing an oxide or oxynitride film or etching via holes.

23. (Original) The method of claim 18, including periodically cleaning the chamber.

24. (Previously Presented) A method of controlling fluorine in production processes in a reactor, comprising at least the steps of:

incorporating a substance in a first material of an interior surface of the reaction chamber, the substance comprising seasoning atoms or molecules that reduce the formation of volatile compounds and complexes when fluorine encounters the surface; and

conducting a production process in the reactor in which fluorine is present in the reaction chamber.

25. (Original) The method of claim 24, wherein the production process includes etching.

26. (Original) The method of claim 24, further including periodic cleaning of the reaction chamber.